14 LIFE BELOW WATER



14 Life Below Water

6514 Campus Population

2 Number of Publications

Documents

UM Surabaya is committed to advancing SDG 14 by supporting the protection and sustainable management of marine and coastal ecosystems, especially those surrounding the city of Surabaya. The university promotes marine conservation through research, education, and community-based environmental programs that address issues such as coastal pollution, biodiversity loss, and ecosystem degradation. By collaborating with local communities, government agencies, and environmental organizations, UM Surabaya contributes to long-term efforts to preserve healthy and resilient aquatic environments.

Raising the Issue of Occupational Safety and Environmentally Friendly Products, UM Surabaya and Singapore Polytechnic Students Plunge to the Lamongan Coast

A total of thirty Singapore Polytechnic students and SP Supervisors arrived at the University of Muhammadiyah Surabaya (UM Surabaya) on Monday (24/9/23). Thirty Singapore students will collaborate with UM Surabaya students in the Learning Express (Lex) Real Work Lecture (KKN) activity which will be carried out for 12 days with a focus on the location on the coast of Paciran Lamongan, East Java.

It is known that Learning Express (LeX) is a 12-day overseas program that equips students with a design thinking mindset in the context of social innovation. In this program, students can enjoy experiences outside of textbooks such as learning a new language and participating in community homestays.

Students can interact and build friendships with youth from Asia and gain a deeper understanding of the issues facing the overseas community.

In the opening which took place in building A, Singapore Polytechnic students and lecturers were greeted with enthusiasm, starting from welcoming from the traditional food menu, introducing regional traditional clothes to several dances in Indonesia.

Dede Nasrullah, Head of the Institute for Research and Community Service (LPPM), said that the KKN Learning Express agenda was the first activity carried out by UM Surabaya with Singapore Polytechnic under the auspices of the LPPM bureau directly. Dede said that there are three main focus problems in this KKN activity.

"There are three problems that we are focusing on, the first is related to the work safety of siwalan farmers and batik artisans, the second is environmentally friendly products and increasing the productivity of farmers," said Dede.

Dede said that the condition of siwalan farmers on the Paciran coast needs serious attention because this is closely related to work safety, plus the majority of siwalan farmers are those with old age but must still harvest.

"Another problem is environmentally friendly products and increasing farmers' productivity. So students who are involved will also work together and solve a problem related to how to use something that has no value into an item that has a selling value, one of which is siwalan leather which has not been used so far," added Dede again.

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Dede also said that in addition to focusing on siwalan farmers, students will also focus on increasing the productivity of Batik Sendangagung Paciran. He hopes that in a short period of 12 days, 30 Singapore students and 31 UM Surabaya students will produce prototypes of aids needed by the community, especially siwalan farmers and batik craftsmen.

Finally, Dede hopes that this collaboration activity will not only take place this year, but also be sustainable in the following years. According to him, Lex is not only about ideas, but also must be developed into a tool that is useful for others.

Meanwhile, Cyrine Jossa, one of the facilitators or Assistant Lecturer of Singapore Polytechnic, was moved by the extraordinary welcome by the UM Surabaya team. He called all Indonesian culture authentic and unique. He was entertained and even 30 students from Singapore were amazed by the performances displayed by UM Surabaya students.

Finally, he hopes that this KKN Lex activity will produce sustainable products, meaning environmentally friendly goods in the production process and business concept without ignoring environmental issues.

Link: [Raising the Issue of Occupational Safety and Environmentally Friendly Products, UM Surabaya and Singapore Polytechnic Students Plunge to the Lamongan Coast | Muhammadiyah University of Surabaya]



UMSurabaya teaches coastal residents to process mask and shell waste into paving

The University of Muhammadiyah Surabaya teaches coastal residents of Bulak-Surabaya, to process mask and shell waste into valuable products, namely paving.

"This activity is part of the National Movement for Mental Revolution (GNRM)," said the Head of the UMSurabaya Community Empowerment Program Dede Nasrullah in Surabaya, Saturday.

This community empowerment activity, continued Dede, was carried out by UMSurabaya in collaboration with the Coordinating Ministry for Human Empowerment and Culture (Coordinating Ministry for Human Empowerment and Culture) and the Indonesian Rector Forum (FRI) with the title "Fight Pollution with Mental Revolution".

"Managing medical waste and shells is a form of real action from abandoned to valuable. Because during this pandemic, a lot of mask waste was found, and on the coast, there was also a lot of shellfish waste," he said.

Not only teaching residents how to process waste to make paving, his party also provided toga seeds and healthy food packages to residents.

"We distribute family medicinal plant gardens (toga) so that residents can cultivate them as a form of action from consumptive and productive change," he said

Dede added that the program is expected to change the way of life, and the way of thinking of the community so that people have a work ethic, integration and cooperation.

A student majoring in Civil Engineering UMSurabaya Yuniar Isnaini, who innovated in processing this waste, revealed that the mask waste contains HDPE plastic which is used as a fine aggregate filler. So that it can attach aggregate of course materials, namely shell waste

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In addition, mask waste also helps other fine aggregates in the form of sand and cement in the paving manufacturing process.

"Before processing the waste of masks and shells, we first clean them using detergent. Then it is rinsed and we burn it using a smokeless burner which is also a campus innovation," he said.

After the shells and masks are burned to ashes, then sorted into fine ash and ready to be mixed with cement to be molded into paving.

"This waste ash mixture is an advantage in paving. Because it increases the compressive strength and ductility of paving," he said.

Vice Chancellor for Student Affairs, Alumni, Innovation and Human Resources UMSurabaya Ma'ruf Sya'ban added that this program was carried out as part of the campus's commitment to invite the community to care about the environment.

"The issue of pollution or mask waste must be a common concern, the action of processing mask and shell waste is a sign that people must love their environment," he said.

Link: [UMSurabaya teaches coastal residents to process mask and shell waste into paving - ANTARA News East Java]

